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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,154

05/25/2007

Toshinori Watanabe

71, 051-034

8842

27305

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10/20/2009

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EXAMINER

BERMAN, SUSAN W

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

10/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/582,154	WATANABE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	/Susan W. Berman/	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 4, 7 and 11-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1796

***Response to Amendment***

The rejection of claims 1-10 as being anticipated by Ghoshal et al (6,832,036, filed 10-11-2002) is withdrawn.

The rejection of claim 11 as being unpatentable over Ghoshal et al, as applied to claim 1 above, is withdrawn.

***Response to Arguments***

Applicant's arguments, see the Remarks filed 07-06-2009, with respect to the rejection(s) of claim(s) over Ghoshal et al '035 have been fully considered in view of the amended claims and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kessel et al (5,217,805) or Kohno et al (7,534,820).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to claim 8, there is no antecedent basis in claim 6 for the recitation "said optical waveguide" in claim 8. Claim 6 recites a "light-transmitting component".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 3, 5, 6, 8, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohno et al (7,534,820). Kohno et al disclose compositions of a cationic photoinitiator and a polyorganosiloxane of formula (1) in column 2, wherein x is an epoxy functional group and R can be an alkyl or aryl group. Specific polysiloxane formulas (2) and (3) are also taught in columns 2-3. The synthesis examples disclose hydrosilyl and epoxy group-containing polysiloxanes. The difference from the instantly claimed composition is that Kohno et al do not teach the specific mol percent limitations of phenyl and epoxy groups set forth in the instant claims.

***Allowable Subject Matter***

Claims 4, 7, 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. With respect to claims 4 and 7, the prior art cited herein and otherwise known to the Examiner does not teach optical waveguides from the epoxy-functional organopolysiloxanes of the instantly claimed formula. With respect to claims 13 and 14, the prior art cited herein and otherwise known to the Examiner does not disclosed the specific organopolysiloxane structure set forth in instant claims 13-14.

### *Conclusion*

The following references are cited as art of interest.

Bahadur et al (US 2008/0260337, having an effective filing date of 08-16-2007) disclose epoxy-functional polysiloxanes and compositions thereof.

McLaughlin et al (US 2006/0199081) disclose an optical reading method and a dimensionally stable film comprising a binder material, curable photoactive material and photoinitiator. The photoactive materials include organopolysiloxanes containing monovalent aliphatic, aromatic and epoxy functional groups, as disclosed in paragraphs [0033] to [0035].

Kobayashi et al (5,198,476) disclose epoxy-functional polyorganosiloxanes as described in column 3, lines 55-63, in compositions with organopolysiloxanes having alkenyl units instead of epoxy units. Although the R groups are defined as monovalent hydrocarbon groups, the specifically disclosed epoxy-modified silicone oils (I), (II), and (III) in the synthesis examples do not contain phenyl groups.

Eckberg et al (5,360,833) disclose compositions comprising an epoxy-functional silicone resin comprised of Q, M, D and T silicone units.

Kessel et al (5,217,805) disclose UV curable compositions comprising a polyepoxypolysiloxane. Formula I discloses a polysiloxane having lower alkyl substituents "R", hydrocarbyl, including phenyl, substituents "R<sup>1</sup>" and epoxy groups "E". Kessel et al do not teach hydroxy or alkoxy substituents. The preferred epoxypolysiloxanes are free of cycloaliphatic substituents (column 4, line 65, to column 5, line 7). Photoinitiators are taught in column 6. Solvents are discussed in column 7. The difference from the instantly claimed composition is

Art Unit: 1796

that Kessel et al do not teach  $\text{RSiO}_{3/2}$  siloxane units or the specific mol percent limitations of phenyl and epoxy groups set forth in the instant claims. The additional components of the compositions disclosed by Kessel et al are encompassed by the comprising language of the instant claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Susan W. Berman/ whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SB  
10/19/2009

/Susan W Berman/  
Primary Examiner  
Art Unit 1796